

REMARKS

Claims 1-14 are pending.

Response to Claim Rejections Under 35 U.S.C. §§ 102 and 103

I. Claims 1, 2 and 7-10 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Choichi et al. (JP-05041221). We note that claim 11 is also rejected under 35 U.S.C. § 102(b) based on the Examiner's analysis in the last full paragraph at page 3 of the Office Action.

II. Claims 3-6, 12, 14 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Choichi as applied to claims 1 and 11, and further in view of Kinkelaar et al. (U.S. Patent Application Publication No. 2004/0191605).

III. Claims 11-14 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Maeda (U.S. Patent Application Publication No. 2004/0086762) and further in view of Choichi and Kinkelaar.

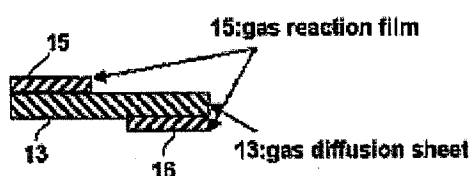
Applicants respectfully traverse.

The present claims relate to a single, solid electrolyte membrane associated with a plurality of first electrodes and a plurality of second electrodes. Further, due to the presently claimed configuration in which the electroconductive member is connected to the fuel electrodes and the oxidant electrodes without using a current collecting plate, the present invention has the advantages of the smaller size, smaller thickness and feasibility of arrangement. *See*, Claims 1 and 11, and paragraph [0009].

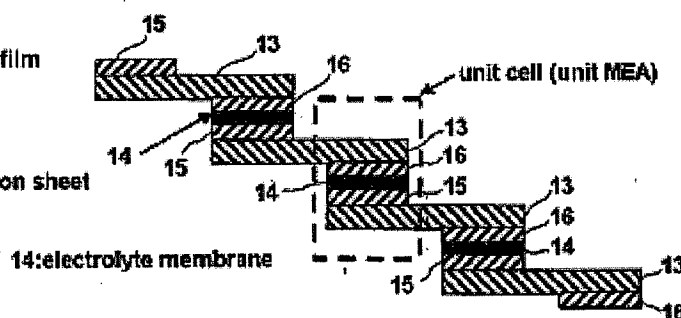
In contrast, Choichi discloses a single, solid electrolyte membrane associated with a single first electrode and a single second electrode. More particularly, Fig. 1A, below, illustrates

the base structure of the fuel cell disclosed in Fig. 3 of Choichi, and Fig. 1B, below, illustrates the combined structure disclosed in Fig. 1 of Choichi.

【FIG.1A】
BASIC STRUCTURE



【FIG.1B】
COMBINATION STRUCTURE



(i) With regard to the above Figs. 1A and 1B, the Examiner asserts that the above Figs. 1A and 1B, submitted by Applicants to interpret Choichi are not accurate. In particular the Examiner asserts that the joining piece is taught to join two ends or more of cell units “through” a solid polymer electrolyte membrane one by one. Thus, the Examiner takes the position that one of ordinary skill would have known, and had the ability to have the electro conductive member penetrate the solid electrolyte membrane at the time of Choichi. Applicants respectfully disagree.

Figs. 1A and 1B, above, are accurate representations of Choichi. In particular, Fig. 1A, above, is identical to Choichi’s Fig. 3.

In addition, with regard to Fig. 1B, Fig. 1B is an accurate representation of Choichi, and clearly shows the structure of Choichi’s fuel cell. In this regard, Choichi discloses at paragraph

[0014] that “drawing 1 shows the outline structure of one example of the inventive solid-polyelectrolyte-membrane fuel cell, which is comprised of multiple cell units 11. Choichi further disclose that the cell unit 11 (drawing 3) which makes the sheet shape of drawing 1 has the flexibility shown in drawing 1. In other words, if one were to straighten out the figure of Choichi’s drawing 1, such that each of the cell units 11 returned to the shape depicted in Choichi’s drawing 3, the resulting figure would read on Fig. 1B, above. Thus, Applicants’ Fig. 1B does accurately represent Choichi’s invention, and further, more clearly depicts the structure of Choichi’s fuel cell.

Accordingly, Choichi fails to disclose or suggest a single, solid electrolyte membrane associated with a plurality of first electrodes and a plurality of second electrodes, as presently claimed. Maeda and Kinkelaar fail to make up for this deficiency.

Regarding the Examiner’s position that “that one of ordinary skill would have known, and had the ability to have the electroconductive member penetrate the solid electrolyte membrane at the time of [Choichi],” Applicants request that the Examiner provide a reference in support of his position one of ordinary skill would have known, and had the ability to have the electroconductive member penetrate the solid electrolyte membrane.

(ii) Regarding present Claim 1, the Examiner asserts that the present claims do not recite a singular membrane layer. In particular, the Examiner asserts that the present claims do not indicate whether the solid electrolyte membrane is one or many sheets. Applicants respectfully disagree.

Present Claim 1 is directed to a fuel cell comprising a solid electrolyte membrane, wherein a plurality of first electrodes are located on one side of the solid electrolyte membrane, and a second plurality of electrodes located on the other side of the electrolyte membrane. Thus,

contrary to the Examiner's position, Claim 1 does recite a single electrolyte membrane. Moreover, it would be clear to one of ordinary skill in the art that the present claims are directed to one (1) electrolyte membrane associated with a plurality of electrodes.

Choichi does not disclose or suggest the presently claimed limitation of one (1) electrolyte membrane associated with a plurality of electrodes.

(iii) Regarding the Examiner's position that Claim 1 is a product-by-process claim, Applicants submit that Claim 1 is not a product-by-process claim.

According to the Examiner, the claim language of Claim 1 implies a structure where in the membrane layer is in a plane that has a connector crossing that plane wherein the membrane can not occupy the same crossover point. The Examiner further asserts that the term "penetrating" is also a product by process limitation term wherein the product of Claim 1 only has to have the electro-conductive member in the plane where the membrane would be. According to the Examiner, the reference suggests such a product. Applicants respectfully disagree.

The Examiner's position appears to be based on claim language which can be construed, if taken out of context, to refer to process steps (e.g., "penetrating"). However, Applicants respectfully submit that one of ordinary skill in the art would not read Claim 1 as being directed to a product-by-process claim.

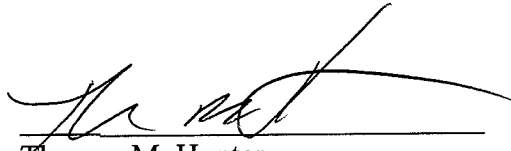
Accordingly, Choichi, Maeda and Kinkelaar fail to anticipate or render obvious the present claims. Withdrawal of the rejections is respectfully requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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